

STARBASE Oklahoma is for Kids!

by Mike Huffman

Okay, so here's where we show our age. Think back to junior high school: do you remember Mr. Wizard? No, I'm not talking about the rock band, the Internet service provider, the techno-wierdo websites, nor any of the plethora of others who have purloined the name.

I am talking about THE REAL Mr. Wizard. Some late-Boomers may remember his 1970s television shows, but for many of us, the memories go much further back.

For instance, when I was in the seventh grade at Putnam City Junior High in Oklahoma City, Mr. Wizard visited our school for an assembly. Having always been interested in science, I remember how his wonderful demonstrations of scientific principles thrilled me. Some lucky students (not me) actually got to go up on stage and help with his demonstrations. Imagine! Standing right next to Mr. Wizard!

I have sometimes wondered whatever happened to Mr. Wizard-- not only the man who played his character, but also the concept of using playful yet instructive demonstrations and interactive games to get kids interested in math and science.

Fortunately in Oklahoma, with all our great aerospace educational programs, his spirit is alive and growing. One of those programs is known as STARBASE Oklahoma. The STARBASE program, like summer aerospace camp programs around the state, uses the study of aviation and space to interest kids in math and science. However, STARBASE programs are considerably more extensive, running throughout the school year and all summer.

STARBASE stands for

<u>Science and Technology Acad-</u> emies <u>Reinforcing Basic Avia-</u> tion and <u>Space Exploration</u>. The acronym itself is exciting and conjures up Star-Trek-like visions of outposts of exploration in the far-flung universe.

STARBASE began in 1989 as a local program at Selfridge Air National Guard base in Michigan. In the early years, the Kellogg Foundation provided funding. However, in the early 90s, Michigan Senator Carl Levin became interested in the program and, in 1993, convinced Congress to fund a national STARBASE pilot program, to be hosted by Air National Guard organizations in each state. Since then, 39 state STARBASE organizations have been created. Programs are funded through a combination of federal, state, and private funds.

The central STARBASE organization establishes a set of general concepts to be covered, but each state organization is free to design its own detailed curriculum to satisfy the objectives. Concepts such as Properties of Air, Physics, Airplanes, Mathematics, Astronomy, and Rocketry emphasize the technical aspects of aerospace science.

Teambuilding and Goal Setting emphasize social skills necessary for humans to accomplish any complicated task (ever consider the management organization required to put the Space Shuttle in orbit?-- all the way from figuring out the basic orbital mechanics to making sure the cafeteria workers on the ground have enough toilet paper in their restroom...)

One of the main concepts that every STARBASE program emphasizes is the importance of a drug-free lifestyle. That concept is reinforced in their Hydroponics module, in which students grow plants in artificial soil (like they would be grown in space) and then subject them to alcohol and tobacco to determine the effects.

Oklahoma's STARBASE program was begun in 1993 and now consists of two operations-- one in Tulsa and the other in Oklahoma City. A total of ten staff members are employed in the program, which is headquartered at the Air National Guard facility in Tulsa. Space Center (TASC). When the new TASC facility is completed, the STARBASE administrative offices will move there and STARBASE will use three additional classrooms there.

STARBASE Oklahoma accomplishes its mission in two ways. First, using its own teachers, STARBASE conducts classes throughout the school year in four classrooms (two each in Tulsa and Okla-



A happy STARBASE Oklahoma student about to launch her very own rocket

Bill Scott became Director in 1995, after helping to initiate the Challenge program for at-risk teenagers with the Air National Guard in Pryor. Bill's background is in education; he and his wife Penny spent seven years in a Kenya missionary school teaching industrial arts and English. Although not a pilot, he has found aviation and especially space education to be fascinating.

Early on, joint decisions were made for STARBASE Oklahoma to act as the education arm of the Tulsa Air and homa City); students from area schools spend one day a week for five weeks attending the classes. Second, STARBASE provides graduate-level training, certification, and resource kits for teachers around the state to teach the STARBASE curriculum; over 200 teachers have already been certified.

Currently, programs are in place for 2nd and 3rd graders ("Starlets") and for 4th-6th graders ("Stars"). This fall, a new program will be started for 7th-9th graders. STARBASE also conducts summer classes; this summer, a new class will be inaugurated for deaf students.

Now, all the foregoing is good and necessary information, but it does not provide a sense of the FUN of STARBASE classes. For that, Bill and Gail Going, Remote Education Coordinator, led us through some of the activities. First, we got a STARBASE logbook in which all our activities would be recorded. We even got to choose our own "call sign," *ala* Top Gun (I don't know, maybe "Goober" wasn't such a wise choice...)

The first thing we noticed is that the exercises require "thinking out of the box" and emphasize the classic steps in the problem-solving model: identify the problem, choose a plan, carry out the plan, and evaluate the results. (I am convinced that when I was in school, we were actually discouraged from thinking independently).

Picture this: your team has just crashed a helicopter in the desert and all of you were injured. You thought you'd be rescued quickly, but you get a message saying the rescue team cannot get to you for three weeks. Your team has to solve the problem using the problemsolving steps. Since the desert is hot during the day and cold at night, you identify shelter as one of your primary needs. The only materials you have to build a shelter are "helicopter parts" (a resource kit containing a few Lego blocks, bits of paper and wood, and other materials). Your team must work together to first decide how to build the shelter and then actually build it. Oh, by the way, since you are all injured, you must work together to accomplish the task with each of your writing hands

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From Barbara...



Hello, Oklahoma Aviator readers-- welcome to the June edition of the newspaper!

Sometimes, sitting and staring at a blank piece of paper, trying to decide what to write and where to start can be a bit intimidating for a writer. As one sits, all alone with the computer, a slow dread can take hold, reaching down deep into the intestinal area, stopping one from putting words down on paper. Will it be good enough? Will anyone want to read it? But not this month! I have a very happy story to share with you. I'll call it, "A Premiere Hatz Adventure."

A few weeks ago, on a warm, breezy afternoon, Julia Clay called and invited Michael and I to meet her and Carl at the private airstrip near Collinsville where they keep their Hatz. They were going to take us for an early evening flight. Having only ridden in an open-cockpit biplane once before, over two years ago, and then only for a few minutes, I was thrilled. I hadn't spent any time with Julia in a few weeks, and was beginning to miss her anyway. What could be better than to



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The Oklahoma Aviator 4621 E. 56th Place Tulsa, OK 74135 email: ok_aviator@mindspring.com fly in her Hatz? With my happy anticipation rushing us along, we beat them to the airstrip by a few minutes.

When they arrived, after the usual jovial greetings and jokes from Carl, Julia changed work shoes for athletic ones, we pulled the bird out of the hangar, and I nearly drooled, looking at her beauty in the afternoon sunrays. What a bird! Her red fuselage and bright yellow wings were stunning and invigorating. Julia had just installed a new, longer propeller and was anxious to try it out. We donned aviator caps and goggles and, after strapping safely in, we started to taxi. The brakes weren't working well, so we delayed a few minutes while Julia added some hydraulic fluid to the master cylinders in the forward cockpit. Strapped in again, with Julia's big smile and my excitement, we taxied to the end of the grass strip, did a powerful take off roll, and were in the air in no time.

Never have I seen the world so beautiful! Direct rays from the evening sun were hitting all the little ponds and lakes. The countryside had greened up only in the past two weeks, and such a bright, active green it was! With the wind on my face and T-shirted arms, I felt one with the world, with God. We flew low and I was able to see the faces of the cows standing belly-deep in the ponds, the dust cloud that flew behind the tractors as they plowed or mowed, and the various shades of green-- from Robert Frost's 'green gold" of spring to the deepest verdant shades.

The Hatz performed beautifully as we flew and flew. This was not to be a short "around the patch" flight, but a long, lazy one. Michael and Carl had taken the van to meet us at Airman Acres, where we would purchase fuel and switch passengers. When it was Michael's turn to fly with Julia, I was sad that my special time with her and the Hatz was over, but was happy to spend time with Carl and some of the airport folks, sitting and talking as we watched planes take off and land. (Why is it that hanging around airports with friends-- just lazing around-- is such a pleasant thing to do? Think maybe it's just in the blood of some of us who can't help it?)

After awhile Carl and I drove back to the airport and met Julia and Michael as they made a beautiful landing back at the home field. The sun was now setting, and a perfect evening was coming to a close.

I felt safe and good flying with Julia, and very rich for having this experience. Thank you Carl and Julia. Your generosity is appreciated!



Julia Clay's beautiful Hatz taxi's out-- too bad you can't see the bright red fuselage and yellow wings!



Julia and Barbie going through the preflight checklist.

PILOTS

Little Billy and his Dad were out at the airport watching planes taking-off and landing.

Little Billy looks up to his Dad and says, "Dad, when I grow up I want to be a Pilot."

His Dad looks down at him and says, "You can't do both son."

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Up With Downs



Earl Downs

Fun Overload

My untested Kitfox Lite, named "Ace," had a wonderful time at Sun 'n Fun in Lakeland, FL. Unfortunately, I was not able to attend. Because I did not have time to perform the first flight, all Ace could do was sit and watch the new Kitfox Lite² and the Series 6 demonstrators perform before the crowds at the Ultralight/Sportplane field. A moment of pride for Ace and myself occurred when Paul Poberenzy stopped by to visit for a while. You may recall that I picked the name "Ace" for my Lite because the first airplane that sparked my interest in homebuilding almost 46 years ago was the Baby Ace. Paul was the driving force behind the Baby Ace and the Junior Ace in the 1950s. I felt like a proud new father when my brother called to tell me of the visit.

Ace arrived back in Cushing on the 18th of April. My brother, Ed (President of SkyStar Aircraft) hung around Cushing a couple days and helped me perform the engine break-in routine. We decided that the carburetor needed some jet adjusting, so I ordered some assorted sizes and planned to do the first flight as soon as they arrived. The jets arrived and the engine ran fine, but then the weather became a factor once again. Have you ever noticed that the wind tends to blow hard in Oklahoma every now and then? How frustrating!

To make matters worse, the weather also affected my ability to work on my Kitfox Lite trailer. I am at the point where I need to paint the steel structure before I "skin" it. The frame is sort of like a birdcage and painting it is a real job. My plan was to spray paint it outside of my hangar because it would take forever to move everything out of the way. Have you ever tried to spray paint a 24-foot long birdcage in a 20-knot wind? The last week in April was so windy that I couldn't move my planes out of the hangar, even if I wanted to, because they would take flight on their own!

I finally set the weekend of May 5 for the final inspection and test flight. My friend Pat Smith agreed to help with the inspection and act as my ground flight test coordinator. You have to know Pat to understand why he is the sort of fellow you want for a backup. He is a non-practicing A&P mechanic and has a V35 Bonanza and an 8F Luscombe that are maintained in pristine condition. Pat is a detail person and that is just want you want when details can make the difference between success and disaster. The final inspection took about 5 hours to complete and we did make a few corrections. It was a ponderous job but well worth it. We completed the inspection on Saturday but the weather shut down any chance of flying.

I worked out a flight test card and reviewed it with Pat. I was determined to make the first flight all work and no play; no one was invited to watch. The test card was a simple plan of maneuvers to perform and numbers to record. I would have a copy of the card on my kneeboard and Pat would have a copy on the ground. Handheld radios would provide the communications. It was a simple plan to note takeoff speed, control response prior to 50 feet, and climb performance. Cruise speeds at various power settings would be recorded and trim and control response noted. Engine performance was also to be noted at various settings. We planned for two



Earl, Ace, and the Twenty-Four-Foot Birdcage

stalls for airspeed verification, one with flaps up and the other with flaps down. Only one landing would be made so the airplane could be inspected. Total flight time was planned for 30 minutes.

Sunday May 6 rolled around and we were all set to go. Unfortunately, Mother Nature did not agree-- about a dozen tornados danced through Oklahoma on Sunday and the test flight was scrubbed. Things did calm down Sunday evening and I was able to do some taxi testing. I was tempted to actually fly but Pat was not there and sticking to my "ground pilot" plan was paramount to safety.

Monday turned out to be better, so Pat met me at the airport at about 1800 hours. Pat loaded the fire extinguisher into the back of my pickup and positioned himself on the ramp near the turf runway 02. We communicated on the multicom frequency with Pat changing over to 122.8 to make traffic calls for me. The FBO was closed and the only activity on the airport was a survey team working near runway 17/35. I planned to keep the entire flight over the airport property.

I guess I am supposed to be an unflappable old salt of a pilot, but I was really buzzed. It was a combination of fun, thrill, and trepidation. After pulling the safety pin on the BRS parachute, I lined up on the runway, uttered the pilot prayer of "Please God, don't let me screw this up," and blasted off.

Maybe "blasted off" is a bit of an overstatement. When a 2-cylinder, 2cycle engine winds up to over 6,000 rpm it doesn't blast, it screams. So, I screamed down the runway. I called my liftoff at 40 MPH (I held it on a bit long) and established a climb. The 50foot control check was fine and I continued the climb while reporting my numbers to Pat. I noticed that the surveyors seemed a little surprised as I flew past them; I guess they have never seen a flying leaf blower before. The cruise tests showed that I still needed to work on the carburetor a bit and some nose down trim was needed. Pat kept track of my comments. Aside from the few required adjustments, Ace flew just like the factory demonstrator I had been flying at the air shows. The stall series proved that the airspeed was reliable and useable for safe approach reference. After one photo pass I landed and tried not to hurt my face by over-grinning.

I was approaching a fun overload. I believe that when we are very young, our parents wire up the "don't have too much fun" circuit in our pliable little brains. You know, like when your mother tells you that too much ice cream is bad for you or when you father says the car is for transportation, not for cruising Main Street to pick up girls. We, of course, continue the pattern, wiring this same circuit into our own children. Anyway, as the week progressed, I made the adjustments and continued my test/fun flying. On the Saturday following the first flight, I put almost 2 hours on Ace flying around the local area practicing takeoffs and landings

That's when it happened! My fun overload warning light illuminated. I must have packed too much fun into a 2-hour period. I figured the only way to handle this emergency was to do something that was less exciting. After about 2 hours of painting the trailer, my fun overload light went out. I will have to be more careful next time.

Any questions or comments? earldowns@hotmail.com

Fill Out This Form!

By Dave Wilkerson

Completing the FAA Application Form 8710- Part 1

Pilots quickly learn that necessity makes the FAA a "file fiend." Forms are vital to the task, so the deeper pilots delve into aviation, the more familiar we should become with FAA forms. Too often we are not. Take, for example, the FAA Form 8710-1. Every pilot applicant uses one, still examiners must often correct them. Here are some tips on completing it.

Surprisingly, applicants find problems just putting their names on the from. The FAA needs one's legal name, but not more than one middle name. *Otto Hans Eduard Maria Leopold von Bismarck* would have to choose his middle name, but could retain Von (capitalized) as part of the last name. Applicants having no middle name should enter "NMN" in the appropriate. Those named *Jr., 2nd, 3rd, IV*, or such should include that in their entry. Once pilots submit a Form 8710, they should use the same name on all subsequent applications unless they have legally changed their name and met 14 CFR 61.25.

Social security numbers pose risks

these days. Some pilots' certificate numbers are also their social security numbers. The industry once encouraged that, before the dark times of computer-based identity theft. Now, the FAA considers social security numbers optional. I advise private pilot applicants to consider having the FAA issue a certificate number; to do so, print "Do not use" in the appropriate blank. Still, it's the applicant's choice.

Listing one's date and place of birth is easy, if we remember the required "mm/ dd/yy" format. Place of birth should include the town/state for U.S. applicants, and city/nation for those born outside the United States. You should list your state by the Postal Service's two-letter ID.

Entering addresses is not always simple. Not everyone has a residence number and street. Using a rural route number address or post office box requires that you include a simple map/directions to your residence on a separate sheet of paper. The simplest perspective on this is to imagine giving directions to a package delivery service. FAA policy requires that pilots use permanent mail-

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STARBASE Oklahoma, cont'd

continued from p. 1. tied behind your backs!

Or this: there is an obsolete nuclear reactor on a nearby planet that needs to be deactivated. The reactor has a container (coffee can) filled with extremely dangerous plutonium pellets (marbles). Your mission is to move the plutonium container from its current location onto a "deactivator pad" (telephone book). If any plutonium is spilled, everyone will die. Since the plutonium is very radioactive, all your work must be done with a "remote manipulator" (inner-tube rubber band with four ropes attached). Working together, with one person on each rope, you must figure out how to cooperatively stretch the remote manipulator over the plutonium container, pick up the container, move it to the deactivator pad, and release it without spilling its very dangerous contents!

Here's one that always reminds the kids of Apollo 13: you are on the Space Shuttle when it is struck by a micrometeor. Damage is sustained to the vehicle and your video link is knocked out; however, you can still communicate with ground control by audio. The ground controller (another team member) devises a solution to repair the damage (creates a certain pattern with a set of pattern blocks). You must repair the damage according to his instructions (replicate his exact pattern), but the two of you can communicate only by voice.

One of the favorites is "Eggbert the Astronaut." Eggbert (a raw egg) must ride the Space Shuttle in for what is known will be a rough landing (a Shuttle model accelerates down a guide wire into a headon collision with a wooden stop block). Your team must devise a means of keeping poor Eggbert from getting hurt.

One of the neatest exercises simulates impact craters on the moon. First, you create the moon's surface (fill a rectangular aluminum baking pan about an inch deep with flour and then sift a thin layer of chocolate cake mix on top). Then, your team sends "meteors" of various size, shape, and mass careening into the surface at different velocities and angles. By relating the resulting craters or tracks to the meteors that produced them, you are then able to look at a photo of the moon and deduce what type of meteor may have produced the craters you see.



See Eggbert ride. Hear Eggbert scream. Watch that sudden stop at the bottom, Eggbert! Splat...ewwww!

Another neat experiment allows kids to understand how a picture that consists of "pixels" can be transmitted from space (there are a lot of adults who don't know this one!).

Add to these all manner of experiments illustrating Bernoulli's Principle, Newton's Laws of Motion, the four forces of flight, building paper airplanes, and other aspects of physics. The culmination of the course is that each student gets to build and launch his/her own rocket.

However, with all the fun, STARBASE is serious business: instilling a sense of excitement about science and technology and building up the self-esteem of young people. Perhaps by doing so, we can pass on our own love of aviation and space technology to the next generation.

For more information, contact STARBASE at 918-833-7757.



Gail Going, Remote Education Coordinator, in the Super Guppy cockpit.









Last week I had a phone call from an airman who had been involved in a traffic accident. In the accident, he was struck from behind and taken by ambulance to the hospital. The hospital physician had prescribed three medications: Naprosyn 500 mg for its anti-inflammatory effect, Flexeril 10 mg for muscle spasm, and Vicodin ES for pain. He asked, "Can I fly with these medicines?"

My answer to him addressed two issues: his pain and the potential effects of the prescribed medications.

I told him that if he is experiencing pain he should not fly. As you know, we all have to self-certify our medical condition before each flight. For instance, we must ask ourselves if we feel okay, if we have a cold, if our ears are stopped up, or if there is any other condition that may interfere with our ability to fly. Pain would fall into that category. In addition, some of his prescribed medications can interfere with one's ability to perform piloting duties. Many anti-inflammatory medicines are okay, as long as the patient is not allergic to the medicine. Naprosyn, an inexpensive, generic product, is probably as good as any- it is not expensive and, other than potential gastrointestinal irritation, is good for anti-inflammatory effects and mild pain relief.

However, Flexeril, in addition to its main function in relieving muscle spasms, also produces a sedation side effect that is not compatible with flying aircraft. Similarly, Vicodin ES, a moderately strong pain reliever with hydrocodone, can produce sedation and also euphoria (a false sense of well-being).

So, in conclusion, I told the airman that for the time being, as long as he is having discomfort as a result of the motor vehicle accident, he should not fly. When he has recovered enough to be off Flexiril and Vicodin ES, and is free of the symptoms they treat, he may return to flying. If he still has only minor aches, he may continue with Naprosyn without any problems. I also reminded him that, when he returns to my office for his next FAA medical, he will need to list the incident on the Form 8500-8.

If you have any questions regarding this article or any others, do not hesitate to contact my office.

Aero Diner Now Open at Jones/Riverside Airport

TULSA - Ryan Noah, new owner of the Aero Diner at Jones-Riverside Airport says, "I love airplanes and always wanted to have a restaurant. Now, I've combined my two favorite activities- cooking and hanging around airports. My Mom taught me to cook; I've been cooking ever since I could stand on a chair to reach the counter."

Noah's establishment is located in the space formerly known as "Debbie's Diner," across from Cypert Aircraft on Piper Way, and is open for breakfast and lunch from 7:00AM until 2:00PM, Tuesday through Saturday.

All Aero Diner menu choices are prepared from scratch, about which Noah expresses pride: "I arrive each morning at 5:45AM to cook homemade biscuits and sausage gravy. We actually pound out chicken fried steak ourselves and cook our own roast beef. We use only real mashed potatoes- nothing instant."

Before opening on April 27, Noah totally remodeled the interior of the restaurant, incorporating bricks, hardwood wainscoting, and galvanized corrugated siding with an attractive 1950s-era airline motif.

Noah, who has a Public Relations and Journalism degree from Northeastern Oklahoma State University in Tahlequah, thought he wanted to be an attorney. However, after receiving a scholarship to law school and starting the first term, he decided his heart was not in it. He says he wants to start flying lessons "as soon as I can."

Let's support Ryan by flying or driving in frequently to eat. After all, how many airport restaurants offer food cooked from scratch?

Tulsa Air & Space Center News



by **B** Mann

This is the second of a two-part history of notable women in aviation. Last month, we left off with Ruth Nichols in 1924. This month, we pick up with perhaps the most famous woman aviatior, Amelia Earhart.

In 1928, Amelia Earhart was the first woman passenger on the dramatic transatlantic flight in the Fokker Friendship, which brought her international attention and the opportunity to earn a living in aviation. By 1929, she was one of but a dozen glamorous, daring female aviators. Amelia Earhart helped to organize the Ninety-Nines and became its first president in 1931.

The Ninety-Nines is an organization open to any woman with a pilot's license. Their purpose is "good fellowship, jobs, and a central office and files on women in aviation." The name was taken from the sum total of charter members-- the group was momentarily called the 86s, then the 97s, and finally the 99s.

Earhart realized her dream of crossing the Atlantic Ocean alone in 15 hours. She reaped international honors, and other record flights followed. On June 1, 1937, she began an around-the-world flight with Fred Noonan as her navigator, taking off from Miami, FL heading east. They reached Lae in New Guinea on June 29, having flown 22,000 miles, with 7,000 more to go. Earhart and Noonan took off for Howland Island, their next refueling stop, but never reached it. They were declared lost at sea on July 18, 1937.

Louise McPhetridge Thaden set many world performance records and became the first woman to win major flying events and awards. Along with Amelia Earhart, she also co-founded the Ninety-Nines.

At 16 years of age, Elinor Smith was the youngest person in the U.S. to have earned a pilot's license. On October 21, 1928 at the age of 17, she flew under four East River Bridges in New York City, including the Queensboro, the Williamsburg, the Manhattan, and Brooklyn Bridges. She was the first person ever to accomplish that feat. On January 31, 1929, she set a new world endurance record of 13 hours, 16 minutes, and 45 seconds.

The fifth woman to get her transport license in the U.S. was Evelyn "Bobbi" Trout. She set three women's endurance records in 1929.

Florence Lowe, later to be known as "Pancho" Barnes, set aviation endurance records and was also an accomplished stunt flyer. In 1929, Barnes became the first woman stunt pilot in the motion picThere is a saying that behind every successful man is a successful woman. In 1931, Anne Morrow Lindbergh became the first woman in the United States to earn a glider license. While seven months pregnant, she served as navigator when her husband, Charles Lindbergh, set a new transcontinental speed record.

Hanna Reitsch began soaring and went on to become one of the first people to cross the Alps in a glider. Her daring and skill landed her in the forefront of Germany's aviation efforts. Before World War II, Hanna was recognized as Germany's leading aviatrix for her work flying experimental aircraft. In 1938, she became the first woman to test pilot a helicopter.

In August 1943, the Women Airforce Service Pilots (WASP) was founded. This government program recruited female pilots, who ferried airplanes across the U.S. and to Europe and who also trained male pilots for combat duty.

Jacqueline "Jackie" Cochran set three major flying records in 1937. She recruited over one thousand WASPs and supervised their training and service until they were disbanded in 1944. In 1953, she became the first woman to break the sound barrier. In 1961, she set a new women's altitude record of 55,253 feet. She also established a new altitude record for the T-38 aircraft by flying 56,071 feet.

In 1960, NASA secretly conducted an experimental program to explore the possibilities of using women as astronauts. The objective was to see whether women could withstand the same strenuous tests as men. Thirteen women-- known as the Mercury 13-- passed all the tests with very high marks and qualified for the Mercury astronaut program. However, they never got the chance to prove themselves in space because NASA cancelled the program.

Valentina Nikolayeva-Tereskova's desire to fly in space became reality on June 16, 1963. She was the first woman to go into space. She was also the 6th Soviet and the 17th person worldwide to go into space.

In 1973, NASA began a new program for testing women astronaut candidates. By 1977, civilian women from all walks of life, ranging in age from 25 to 65, volunteered to be poked and probed, chilled and heated, confined and cajoled as test subjects. The tests confirmed that women could endure the same physical hardships as men and often had better psychological capabilities.

On June 18, 1983, Dr. Sally Ride flew on the seventh Space Shuttle mission and became the first American woman in space, twenty years after Valentina Tereshkova. Fifty-seven men had gone into space before Dr. Ride made history. Her second mission came along in 1984, accompanied by a second female crewperson, Dr. Kathryn Sullivan. On that

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mission, Dr. Sullivan became the first woman to walk in space.

On December 14, 1986, Jeana Yeager and Dick Rutan took off from Edwards Air Force Base to break one of aviation's last records: to fly around the world nonstop and non-refueled.

In 1991, Patty Wagstaff became the first woman to win the title of U.S. National Aerobatic Champion, a title she defended in 1992 and 1993.

Eileen Collins was the first female to pilot a U.S. Space Shuttle flight- STS-63 in February, 1995- the first flight of the new joint Russian-American Space Program. Mission highlights included a rendezvous with the Russian Space Station Mir, operation of Spacehab, the deployment and retrieval of an astronomy satellite, and a space walk. In 1999, she became the first female U.S. Space Shuttle commander.

Dr. Shannon Lucid holds the United States single-mission space flight endurance record on the Russian Space Station Mir. The mission lifted off from the Kennedy Space Center on March 22, 1996. Following docking, Dr. Lucid transferred to the Mir Space Station, where she performed numerous life science and physical science experiments during the course of her stay. She returned to Earth on September 26, 1996, having traveled 75.2 million miles in 188 days, 4 hours and 14 seconds.

These are just a few of the many women who have opened the door of aerospace to all women!



GAMA Bestows Wood Award on OSU Sophomore Cheri Dyson

The General Aviation Manufacturers Association has selected Cheri Dyson, a sophomore at Oklahoma State University, to receive the 2001 "Dr. Harold S. Wood Award." This annual award honors top students attending a National Intercollegiate Flying Association (NIFA) member school. The award, sponsored by GAMA, honors Dr. Harold S. Wood, NIFA executive director emeritus and longtime supporter of aviation education, by recognizing one outstanding young college scholar/pilot each year.

Cheri Dyson was chosen as the 2001 winner as a result of her academic achievements, flying skills and extracurricular activities. Dyson is an instrument and commercially rated pilot and recently received her Certified Flight Instructors (CFI) rating. She maintains a 4.0 GP.A. while participating in the OSU Flying Aggies Flying Club, working at the OSU Flight Center and FedEx Express, and playing guitar at a weekly Bible study session. In 1999 and 2000, Dyson was awarded the Top Female Pilot in her NIFA region and has been on the President's Honor Roll at OSU since 1999.

The award plaque is mounted on a wooden propeller and accompanied by a check for \$1,000. The award was to be presented at the NIFA National Safety and Flight Evaluation Conference (SAFECON) in Grand Forks, North Dakota at the University of North Dakota on May 19, 2001.

OASC and 99s Host Aviation Art Contest Winners

OKLAHOMA CITY - The Oklahoma Air and Space Commission and the Oklahoma Chapter of the Ninety-Nines recently co-hosted a reception for the Oklahoma winners of the International Aviation Art Contest.

The three top artists in three age categories (6-9, 10-12 and 13-17 years of age) were invited to the April OASC Board of Directors meeting, where they received certificates. The presentation was followed by a lemonade and cookies reception in the atrium lobby of the DOT Building in the capitol complex. Eight of the nine winners attended with parents and teachers. The OASC Board of Directors enjoyed the same fare when their meeting adjourned. The homemade cookies were gobbled down by one and all.

In February, the 99s Chapter wrote letters to each of the almost 200 entrants to thank them for entering and to encourage their learning more about aviation and space. The work of the winners from Oklahoma will compete in Washington, D.C.; winners there will go to Paris for international judging.

Sonic Junior Balloonist Program Takes Flight in Area Schools

OKLAHOMA CITY - Sonic Drive-Ins is offering area schools the opportunity to participate in the Junior Balloonist Program for the 2001-2002 school year. The program is designed to demonstrate the science behind hot air ballooning, as well as offer a unique opportunity to showcase each participating school and its students by constructing and flying hot air



balloons made of tissue paper. This second year of the program will triple the number of participating students over last year.

Each participating teacher will be provided with a detailed integrated lesson plan, materials for each student to construct a hot air balloon, "helpful hints" for a successful launch, and a resource guide for Internet links and, courtesy of Sonic Drive-Ins. Each student who successfully completes the program will receive a Sonic Junior Balloonist certificate.

"We're excited about the opportunity to offer the Jr. Balloonist Program to area schools as a part of Sonic's commitment to education. We feel certain that all participants will come away with a better understanding of the science of hot air ballooning while having a lot of fun in the process!" said Tom Libby, program coordinator.

Participating teachers will receive an invitation to attend a hands-on learning workshop.

For more information, contact the Sonic Junior Balloonist office at 405-948-4000, visit their web site at www.balloonfest.com, or email them at juniorballoonist@ayoo.com.

Historic Vietnam-Era YL37 Helicopter Goes t

TULSA - On May 18, rain fell and tears flowed as pilot Larry Turner landed a historic helicopter in Veteran's Park in Tulsa, for a ceremony to begin its journey to Washington, DC. The helicopter, a restored Vietnam-era Sikorsky UH-34D "Sea Horse," was to be displayed on the Washington Mall adjacent to the Vietnam War Memorial over the Memorial Day weekend. This particular helicopter is a rare survivor of America's first involvement in the Vietnam War, dating back to the early 1960s.

The story begins in 1985, when Mike Schneider and Gerald Hail of Inola bought a UH-34D from the Air Force boneyard at Davis-Monthan Air Force Base in Tucson, AZ. The UH-34D is a piston-engine utility helicopter powered by a 1525-hp Curtiss-Wright R-1820.

Their intention was to use it for parts to support another flying UH-34 as part of a helicopter lifting service they were planning. But, about three years ago, Mike and Gerald decided to restore the aircraft. While going Among the markings was the "bureau number." Ed Tatman of Stigler, by then interested in the project, did other research and was able to confirm that it was indeed YL37.

Many of us may not know the history of helicopter usage in Vietnam. The first Marine Corps helicopter unit to serve there was HMM-362, under the command of Lt. Col. Archie Clapp. Affectionately known as "Archie's Angels," they arrived in April 1962, back when the U.S. was still in an "advisory" role to the South Vietnamese. Helicopters had not been used extensively in combat situations, especially in the type of terrain and warfare that existed in Vietnam. HMM-362's effort began as a test to see if it would work.

The unit arrived at a WWII Japanese fighter strip near Soc Trang, southeast of Saigon, with a complement of aircraft which included twenty-four recently overhauled UH-34Ds, three OE-1s and one R-4D. The UH-34D was designed for hauling cargo and passengers and was cer-



Amid the prodigous noise of its Curtiss-Wright R-1820 and whop-whop of its rotor, the YL37 Sikorsky UH-34D touches down in Veteran's Park.

through the logbooks, they noticed the helicopter apparently had had extensive combat history. For instance, there were 54 bullet hole patches documented in the logbooks and other unrepaired bullet holes still remained in the airframe. Curious, they began doing Internet research with the Marine Helicopter Association and began to suspect that their aircraft was part of the first helicopter unit in Vietnam, known as HMM-362.

The helicopter, as they had received it from Davis-Monthan, was painted a uniform coat of olive drab all over, with no markings visible. However, during the restoration, as Mike, Gerald, and Mike's son Jesse began sanding through the paint layers, they discovered the original markings, which indicated that it was indeed part of HMM-362, a specific aircraft designated as "YL37."

weapon. Although the aircraft had no armament and no armor plating, HMM-362 maintenance personnel devised and built their own gunmounts and installed M-60 machine guns on each side. They also built armor plating for the pilot and gunner, using quarter-inch steel plate. According to one veteran, many of

tainly not designed to be an offensive

the first missions they flew involved transporting "pigs and rice" for the Vietnamese army. However, their mission quickly evolved into transporting troops into and out of combat areas (landing zones or LZs, as they became known). The first such missions involved South Vietnamese army troops. The first reported combat damage occurred after only about eight days "in country"-- a bullet having pierced an oil line.

In May, the squadron flew its first



Ed Tatman, an original HMM-362 crew chief, delivers an emotional message of remembrance-- a fitting Memorial Day tribute.

night medical evacuation. During that time, the Angels also developed tactics for a new form of warfare. The "Eagle Flight" tactic was first employed in June of that year. An Eagle Flight consisted of four troop-loaded UH-34s orbiting a tactical area to engage escaping Viet Cong troops. The first joint USMC, US Army, and Vietnamese National Air Force assault mission took place in July.

In the early days of the Vietnam War, helicopter squadrons were rotated "out of country" every four months. Thus, on August 1, 1962, HMM-362 left Vietnam for the first time.

On September 1, 1965, the unit returned to Vietnam, commanded by Lt. Col. Jim Aldworth, having been recently re-dubbed the "Ugly Angels," reportedly after a comment made by a rescued soldier ("Man, that's one ugly angel!"). The unit served in Vietnam from then until August 1969 when it was disbanded. It was during this time that YL37 served its tour of duty, where it was shot down twice. After the second time it was shot down, YL37 was sent to Japan for rapair. However, during that time, HMM-362 was disbanded and all the other UH-34s were given to the South Vietnamese army. Thus it was that YL37 "fell through the cracks." After the repair in Japan, it was transported back to the U.S., where it was assigned to an Air National Guard unit for a couple of years.

After that tour, it was sent to Davis-Monthan, where serendipity would lead Mike Schneider and Gerald Hail.

By then convinced that the historic significance of YL37 demanded a full restoration of the aircraft to its original state, Mike and Gerald formed the "YL37 Group," a charitable non-profit corporation dedicated to restoration, preservation, and education. A group of six or seven volunteers completed the restoration and, along the way, other original HMM-362 pilots, crewmembers, and maintenance personnel have become associated with the project in one way or another. The group gets its funding from the HMM-



YL37 Group members, all of whom served in HMM-362 in Vietnam.

to Washington for Memorial Day Celebration

362 Group and from private donations. Luckily, replacement parts are not a problem-- military parts are still fairly widely available and many parts from the civilian version, the Sikorsky S-58, are interchangeable. If you'd like to make donations or otherwise contact the YL37 Group, email them at yl37@aol.com

Since the restoration was complete, YL37 has flown "a couple hundred hours," according to Mike Shneider. Licensed in Experimental-Exhibition category, YL37 has a gross weight of 13,000 pounds and thus requires a type rating to fly. Mike, Gerald, and Jesse all are type rated in the aircraft, as are other original UH-34D pilots who are part of the YL37 Group, including Larry Turner and Roger Cook.

Many of the YL37 flights are to public schools located within its 2-hour cruise range. To date, YL37 has visited over thirty schools, where students congregate to eagerly hear its history, often related by some of the original HMM-362 personnel.

According to Mike Schneider, flying YL37 is an opportunity for humility and reflection. "Your mind always wanders to what this thing has been through, the history that it has, and the people who put their lives on the line. I'm honored to be able to bring recognition to what they did."

One of the members of the YL37 Group is Gary Doss, who was a UH-34D gunner in Vietnam. During one mission, an enemy round came through the bottom of the aircraft, and went through the self-sealing fuel tank. Gary felt the thump as it impacted against the steel armor plate under his seat.

On May 18, Ed Tatman, an original HMM-362 crew chief, delivered a short talk at the ceremony at Veteran's Park, his voice choking with emotion, perhaps remembering past YL37 missions and anticipating future ones.



School children from Siloam Springs, AR hear the YL37 story.

History of Davis-Monthan Air Force Base

[Editor's Note: Often while researching stories, we come across interesting side trips. One such is Davis-Monthan Air Force Base, the site of the famous "boneyard," where over 5000 aircraft are stored. Here is a short history of Davis-Monthan.

The Arizona Aerospace Foundation, which also operates the Pima Air and Space and Titan Missile Museums, conducts weekday tours of AMARC. For more information on tour schedules and costs after December, contact the Pima Air and Space Museum at (520) 574-0462.

A limited number of special tours of the 355th Wing can be arranged for organized groups of 20 or more, such as civic organizations and schools. Contact the public affairs office at (520) 228-5091 for additional information.

For more information, read "50 Years of the Desert Boneyard: Davis Monthan A.F.B., Arizona" by Philip D. Chinnery.]

Davis-Monthan Air Force Base is a key Air Combat Command installation, located within the city limits of Tucson, AZ, with a colorful history and a long tradition of excellence in service to our country.

Davis-Monthan became a military base in 1925, but its origins can be traced to the earliest days of civil aviation. In 1927, Charles Lindbergh, fresh from his non-stop crossing of the Atlantic Ocean, flew his "Spirit of St. Louis" to Tucson to dedicate Davis-Monthan Field -- then the largest municipal airport in the United States. The base was named in honor of Lieutenants Samuel H. Davis and Oscar Monthan, two Tucsonans and World War I era pilots who died in separate military aircraft accidents.

In 1940, with war clouds on the horizon, the field was selected for expansion. During World War II, D-M served as an operational training base for B-18 Bolos, and B-24 Liberators and, nearing the war's end, B-29 Superfortresses.

At the end of the war, operations at the base came to a virtual standstill. It was then the base was selected as a storage site for hundreds of decommissioned aircraft, particularly excess B-29s and C-47s. Tucson's dry climate and alkali soil made it an ideal location for aircraft storage and preservation, a mission that has continued to this day.

The Strategic Air Command (SAC) ushered in the Cold War era at D-M in May 1946, in the form of two B-29 bom-

bardment groups. Once again, the skies of the "old Pueblo," Tucson's nickname, were filled with the sights and sounds of the Superfortress.

On March 2, 1949, the Lucky Lady II, a B-50A of the 43rd Bombardment Group, completed the first nonstop round-the-world flight, having covered 23,452 miles in 94 hours and 1 minute. Lucky Lady II was refueled four times in the air by KB-29 tankers of the 43rd Air Refueling Squadron. The jet age came to the base in 1953, when SAC units converted to the new B-47 "Stratojet." That same year, the Air Defense Command appeared on the base with a squadron of F-86A "Sabre Jet" fighters.

In the early 1960s, the 390th Strategic Missile Wing and its 18 Titan II sites were activated here. In July 1963, a wing of U-2 strategic reconnaissance aircraft was assigned to the base and began flying global missions. The U-2s remained at the base until 1976, when they were transferred to Beale AFB, Calif.

The year 1964 brought back the combat crew training mission of the World War II years -- this time for the Air Force's newest and most sophisticated fighter, the F-4 Phantom. In July 1971, the 355th Tactical Fighter Wing, flying the A-7 Corsair II aircraft, was activated at the base and the F-4s moved to Luke AFB, Ariz., near Phoenix.

In October 1976, the base was transferred to Tactical Air Command after 30 years under SAC. It was also that year the 355th TFW accepted the first A-10A Thunderbolt. Since 1979, D-M has been the training location for pilots in the A-10.

The 1980s brought several diverse missions to D-M, and the headquarters charged with overseeing them was the 836th Air Division, which was activated in January 1981. Shortly thereafter, the base welcomed the 868th Tactical Missile Training Group, which trained the crews to operate, maintain, and defend the Ground Launch Cruise Missile system. The 41st Electronic Combat Squadron, equipped with the EC-130H "Compass Call" aircraft, was the next to arrive, followed by the 602nd Tactical Air Control Wing, a unit responsible for the Air Force's tactical air control system west of the Mississippi River.

The most recent unit to join the 355th Wing is the 42nd Airborne Command and Control Squadron who arrived at D-M from Keesler AFB, Miss. The squadron's EC-130E Hercules aircraft carry an airborne battlefield command and control center capsule, and provides continuous control of tactical air operations in the forward battle area and behind enemy lines.

Nearly every major air command, the Air Force Reserve and the Air National Guard are represented among the associate units at D-M. Among the base's associate units are the 12th Air Force headquarters, Aerospace Maintenance and Regeneration Center, 305th Rescue Squadron, and Detachment 1, 120th Fighter Interceptor Group.

Twelfth Air Force is charged with commanding, administering, and supervising tactical air forces west of the Mississippi River. As one of ACC's numbered air forces, Twelfth Air Force operates combat-ready forces and equipment for air superiority-- gaining and maintaining control of airspace; interdiction-- disrupting enemy lines of communication and logistics; and close air support-- working with U.S. and allied forces to defeat the enemy at the point of contact.

AMARC, an Air Force Material Command unit is responsible for the more than 5,000 aircraft stored at D-M The center annually receives about 400 aircraft for storage and processes out about the same number for return to the active service, either as remotely controlled drones or sold to friendly foreign governments.

The 305th Rescue Squadron, and Air Force Reserve unit, flies the HH-60G "Pavehawk" helicopters. Its primary mission is search and rescue.

Detachment 1, 120th FIG, an Air National Guard unit, flies the F-16 "Fighting Falcon." Each week, two F-16s rotate to the base from their home base in Great Falls, Mont. These aircraft can scramble in less then five minutes to identify, intercept, and, if necessary, destroy any airborne threat to U.S. security.

Other federal agencies using the base include the Federal Aviation Administration, the U.S. Customs Service Air Service Branch, the U.S. Corps of Engineers, the Federal Law Enforcement Training Center, and a detachment of the Naval Air Systems Command.

Approximately 6,000 military and 1,700 civilian employees work at Davis-Monthan and nearly 13,000 military retirees reside in the Tucson area.





SkyStar Aircraft Narrowly Averts Disaster

CALDWELL, ID - "It was a miracle no one was injured or killed,' stated Ed Downs, President of SkyStar Aircraft, as he assessed the destruction in SkyStar's final assembly and show plane hangar. Downs continued, "The Kitfox has been on some pretty wild rides over the last 17 years, but this takes the prize.'

Wednesday, May 9, was a very normal, busy day at SkyStar until 3:00 pm that afternoon. A Cessna 182 had just been pulled from its hangar, located about 75 yards from the Kitfox plant, to start a newly installed engine. The 182's engine roared to life at full power and the airplane accelerated rapidly towards the SkyStar final assembly/ show hangar. The occupant of the 182 was not able to shut down the engine or stop the runaway airplane. The 182 crashed under the partially open SkyStar hangar door and chewed its way to the back of the hangar. Six SkyStar employees that were working in the final assembly and packaging area ran for their lives, successfully avoiding the churning propeller (which finally broke off) and shrapnel. One badly shaken employee was heard to quip later, "They are right, how fast you can run depends on what's chasing you!"

According to Downs, "I think humor is a good way of dealing with trauma, but the reality of the loss is stunning. Our valuable demonstration airplanes, also used for engineering research, were destroyed. Two customer airplanes that were under construction were severely damaged. Tooling and general hangar contents were destroyed or damaged. We are at the beginning of the air show season and our show planes are gone. We have our

Ace to be "Bubba-Ized"

Earl Downs, a regular Oklahoma Aviator contributor and brother of Ed Downs, SkyStar President, reports that his newly-first-flown Kitfox Lite (see page 3) is being pressed into service as a demonstration airplane to help out SkyStar in their "time of trial." But there is even more to the story.

This year at Sun 'n Fun, SkyStar exhibited a new airplane, the "Lite Squared," a two-place version of the Lite to be powered by a Rotax 503. A proof-of-concept airplane for the new proposed Sport Plane rule, it was equipped with a tricycle gear and big 8:00 x 6 tires, making it truly suitable for off-airport operation.

At the last minute before Sun 'n Fun, the Rotax 503 became unavailable, so SkyStar installed the only spare engine they had -- a 100-hp Rotax 912S! Interestingly, the compact 912S fit the standard engine cowling with room to spare-- in fact, a two-inch prop extension was required. Performance was spectacularthe takeoff roll required only three second from dead stop to airborne, accelerating faster than a Corvette. The rate of climb approached 1800 fpm!

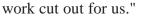
Now, here was an airplane that

would attract press attention and appeal to the big-belt-buckle, monster-truckrally crowd! Earl refers to it as the "Bubba factor." True to predictions, the airplane was a hit at Sun 'n Fun.

Then, with the Lite Squared back home in Caldwell, ID, came the infamous May 9 disaster, and it was destroyed. Shortly afterward, Earl agreed to let SkyStar use Ace as one of their demo airplanes for the 2001 air show season.

In return, Ace will also be "Bubbaized," with a Rotax 503 engine, big main wheels, and big tailwheel. Luckily, during construction, Earl had rib-stitched the fabric to the wing and installed a BRS parachute, which makes it safer to be used as test plane for the increased engine size and performance. These changes will require that Ace, formerly an ultralight, be licensed as an Experimental category aircraft.

SkyStar plans to call the new creation the Lite "Commando"; Ace's military-style paint job will fit well with that idea. Plans are for the standard kit-built Commando to be convertible from tricycle to tailwheel gear configuration at will.



100LL

Catering

Rental Cars

Courtesy Car

WSI & DTN Weather

But work they have, and in less than 24 hours, SkyStar was back in full production, both for new aircraft and parts.

"The Kitfox team has really pulled together," states Downs, "and gotten things on the move. We have secured demonstration airplanes from our builder base that are exciting and beautiful. We have already begun to build new demonstration airplanes here at the factory and we are rearranging our aggressive demonstration schedule. Insurance and legal issues are being dealt with in a productive manner. All in all, we are in great shape.'



Catering

Don't forget Oklahoma's Best Bar-B-Q minutes from the airport!

Conference Room

Aircraft Rental



The Kitfox Lite Squared, a big-tire, big-engine, two-place version of the Lite.

The Oklahoma Aviator, June 2001, Page 10

Considering LASIK Eye Surgery?- First Consider the Risks!

by Mike Wayda

Pilots know their vision is the most important sense they possess, and their safety depends on how well they see. The prospect of having refractive surgery to improve eyesight-- so as not to require glasses or contact lenses-- is an attractive, appealing notion to many people.

The advertisements of some refractive surgery practitioners make the procedures appear to be foolproof. However, there are risks. Before making a decision to have refractive surgery of any kind, pilots should consult an eyecare specialist to determine how a particular procedure could affect their vision, as well as their work and leisure activities.

One of the most popular and effective refractive surgery procedures is laser-assisted in situ keratomileusis (LASIK). LASIK, as well as radial keratotomy (RK) and photo refractive keratectomy (PRK), have potential adverse effects that could be incompatible with flying duties.

LASIK practitioners advertise that 95 to 99 percent of their patients are doing well and are pleased with the outcome of their surgery. However, if that leaves 1 to 5 percent of patients with unsatisfactory outcomes, then thousands of people, some of whom are pilots, are experiencing permanent vision impairment. For some, this could mean the end of flying as a career or even as a leisure activity. Adverse effects may include corneal scarring or opacities, worsening or variability of vision, night glare, and haziness of vision.

Listed below are some important factors to consider before deciding to have refractive surgery.

Limiting Conditions

If you have any of the conditions listed below, refractive surgery may not be for you.

- Problems with your eyes other than needing glasses/contacts.
- Unusually-strong vision correction.
- A prescription which changes frequently.
- Taking certain medications, such as steroids, which may interfere with the healing process.
- Corneas that are too thin for refractive surgery.
- Pupils that are too large in dim light.

Other Risks and Considerations

- Separate surgeries are often advisable for each eye-- having both eyes done at once involves additional risk.
- More than one surgery may be required to get the desired result.
- You may develop undesirable night vision artifacts, such as glare, halos, starbursts, etc.
- Your contrast sensitivity could be significantly reduced, resulting in poorer

vision in dim light conditions.

- You may permanently lose vision or become blind.
- After treatment, you may still need reading glasses.
- Long-term results of refractive surgery are not known.

Finding the Right Doctor

Before selecting a doctor, you should get satisfactory answers to the following questions:

- Is your doctor a refractive surgeon? Will the surgeon see you at all visits before and after surgery?
- Does your doctor use an FDA-approved laser?
- On how many eyes has your doctor performed LASIK surgery with the same laser?
- Is your doctor willing to spend the necessary time to answer all your questions?
- Does your doctor encourage followup and management of you as a patient?
- Do you feel you know your doctor and are you comfortable with an equal exchange of information?

Preparations and Expectations

- Insist on an informed consent form, read and understand it thoroughly, and get answers to your questions prior to proceeding.
- Ask your doctor to familiarize and

make you comfortable with the steps of the procedure, including sights, smells, sounds of surgery

- Ask your doctor about post-operative pain or discomfort to be expected.
- Plan not to wear contact lenses just prior to evaluation and surgery.
- Plan to avoid cosmetics for 24-36 hours prior to surgery.
- Arrange for someone to drive you home after surgery.
- Plan to take a few days to recover.
- Expect not to see clearly for a few days.
- Be prepared to put drops or other medications in your eyes during the recovery period. Be prepared to wear an eye shield for a period of time after surgery to avoid injury.
- If the surgery does not produce the desired result, make sure your prescription has stopped changing before planning any further surgery.

For more information, refer to a detailed article discussing LASIK and PRK procedures published in the Winter 1998 Federal Air Surgeon's Medical Bulletin. Also, for patient comments on LASIK, visit:

w w w . s u r g i c a l e y e s . c o m / explinks.htm#table

[Editor's Note: this article is an edited version of one that appeared in the Federal Air Surgeon's Medical Bulletin and is printed here with permission. The article was recommended by Dr. Guy Baldwin.]

PLACEHOLDER FOR AOPA ADVERTORIAL.PDF

| WHEN | WHAT | WHERE | CONTACT | DETAILS |
|----------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1st Thursday | Dinner Meeting- Oklahoma Pilots Assoc dinner and meeting | Wiley Post Airport, Oklahoma City, OK | Helen Holbird- 405-942-6308 | |
| 1st Saturday 7:30AM-10:00AM | Fly-In Breakfast- Ponca City Aviation Boosters Club | Ponca City Airport, Ponca City, OK | Don Nuzum- nuzum@poncacity.net Bruce Eberle- 580-762-5735 | Held rain or shine |
| 2nd Wednesday 7:30PM | Meeting- Tulsa Cloud Dancers Balloon Club | Martin Library Tulsa, OK | Frank Capps | |
| 2nd Thursday 7:00PM | Meeting- Oklahoma Windriders Balloon Club | Metro Tech Aviation Career Center, Oklahoma City, OK | Ron McKinney- 405-685-8180 | For all balloon enthusiasts |
| 3rd Saturday | Meeting- Green Country Ultralight Flyers Organization (GCUFO) | Call 918-632-6UFO for location and details | Bill Chilcoat- 918-827-6566 | |
| 3rd Sunday | Tulsa Cloud Dancers Balloon Flight | Contact Frank Capps for time/location | Franks Capps- 918-299-2979 | |
| 3rd Monday | Meeting- IAC Chapter 10 | Contact Joe Masek for time/place | Joe Masek- 918-596-8860 RHR jem@yahoo.com | |
| 3rd Monday 7:30PM | Meeting- EAA Chapter 10 | Gundy's Airport, Owasso, OK | Bhrent Waddell- 918-371-5022 bwaddell@tulsa.oklahoma.net | |
| Saturday following 3rd Monday | Pancake Breakfast- EAA Chapter 10 | Gundy's Airport, Owasso, OK | Bhrent Waddell- 918-371-5022 bwaddell@tulsa.oklahoma.net | |
| 4th Tuesday 7:00PM | Tulsa Chapter 99s Meeting | Robertson Aviation, Jones/Riverside Airport, Tulsa* | Charlene- 918-838-7044 or Frances- flygrl7102@aol.com | *Unless otherrwise planned. All women pilots including students are welcome to attend. |
| 4th Thursday 7:30PM | Meeting- Vintage Airplane Association Chapter 10 | South Regional Library, 71st & Memorial, Tulsa, OK | Charles Harris- 918-622-8400 | |
| Jun 1 | Aerobatic Competition- 15th Annual Okie Twist-Off, IAC Chapter 59 | Stillwater Regional Airport | Debbie Hamble- 405-372-0208 debbie.hamble@lycos.com | Practice day May 31, competition Jun 1 |
| Jun 1-3 | 5th Annual Durant Magnolia Balloon Festival | Durant, OK | Frank Capps 918-299-2979 | |
| Jun 2 | 11th Annual AOPA Fly-In and Open House | AOPA Headquarters Frederick Municipal Airport, Maryland | Warren Morningstar- 301-695-2162 warren.morningstar@aopa.org | |
| Jun 4-8 8:30AM-4:30PM M-F | Aviation Careers Academy, Tulsa Community College | Tulsa Technology Center, RiversideCampus | TCC Continuing Education Office- 918-595-7766 | Covers aviation history, flight basics, air tr control, avionics and more. Field trips to Nordam, United Airlines, Boeing, and Tuls Int'l. \$175 per person; some scholarships available |
| Jun 4-8 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 1-3. \$198/student |
| Jun 8-9 | Texas Fly-In | Gainesville Municipal Airport Gainesville, TX | Jeff Bilyeu- 940-668-4565 | |
| Jun 9 | Sulphur Spring Water Festival Fly-In for Fun | Sulphur Municipal Airport (F30) Sulphur, OK | Beverly Orr- 580-622-2824 | Free transportation to downtown activities provided from airport. |
| Jun 9 8:00AM-4:00PM | Airport Appreciation Day and Open House | Blackwell-Tonkawa Airport | Joe Harris- 580-363-0200, 800-535-1079 | Young Eagles flights, hot air balloons, parachutists, discounted fuel. Airshow 1- |
| Jun 9 11:00AM-4:00PM | Westheimer Hangar Party | Hangar 5, Max Westheimer Field Norman, OK | Stan Bauman- 405-288-2383 stan-bauman@immy.com | Hangar wash starting at 8:00AM, contact Graham Solomon, 325-7344 |
| Jun 9-10 7:00AM-4:00PM | Airfest | Drake Field, Fayetteville, AR | 501-521-4947 | B-25, B-17, P-51 will be present. Homebuilts, classics and antiques welcom |
| Jun 9-13 8:30AM-4:30PM M-F | Aviation Careers Academy, Tulsa Community College | Tulsa Technology Center, RiversideCampus | TCC Continuing Education Office- 595-7766 | Covers aviation history, flight basics, air tr control, avionics and more. Field trips to Nordam, United Airlines, Boeing, and Tul- Int'l. \$175 per person; some scholarship available |
| Jun 11-15 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 3-5. \$198/student |
| Jun 12 9:30AM | OASC Regional Airport Planning Meeting | Central Tech, Drumright, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Chandler Municipal, Cleveland Municipal, Cushing Municipal, Pawnee Municipal, Pe Municipal, Stillwater Regional, and Stroud Municipal airports |
| Jun 13 9:30AM | OASC Regional Airport Planning Meeting | Tri-County Technology Center, Bartlesville, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Bartlesville Municipal, Hominy Municipal, Nowata Municipal, Pawhuska Municipal, a Skiatook Municipal airports |
| Jun 15 9:30AM | OASC Regional Airport Planning Meeting | Tulsa Technology Center , Jones/RVS Airport, Tulsa, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Jones Memorial-Bristow, Okmulgee Municipal, Pogue Municipal-Sand Springs Richard L. Jones, JrTulsa, and Keystone Park-Westport airports |

| For a free listing of | Calendar of Events, cont'd For a free listing of your event, email us at ok_aviator@mindspring.com or call 918-496-9424. To allow time for printing and publication, try to notify us at least two months prior to the event. | | | | | | | |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| WHEN | WHAT | WHERE | CONTACT | DETAILS | | | | |
| Jun 18-22 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 5-9. \$198/student | | | | |
| Jun 19 7:00PM-9:00PM | Aviation Safety Program | Terminal Building Stillwater Regional Airport | Gary Johnson- 405 372 7881 | Sponsored by OKC FSDO, Stillwater Regional, OSU Aviation Svcs, & Stillwater Air Center. Refreshments and door prizes. | | | | |
| Jun 24 | Annual Hamburger Fly-In | Sand Ridge Airpark, Collinsville, OK | | | | | | |
| Jun 25-29 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 1-3. \$198/student | | | | |
| Jun 26 9:30AM | OASC Regional Airport Planning Meeting | Oklahoma Technology Center, Ardmore, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Ardmore Municipal, Ardmore Downtown Executive, Healdton Municipal, Lake Texhoma State Park-Kingston, Madill Municipal, Lake Murray State Park- Overbrook, and Tishomingo Airpark airports | | | | |
| Jun 27 9:30AM | OASC Regional Airport Planning Meeting | Pontotoc Technology Center, Ada, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Ada Municipal, Atoka Municipal, City of Coalgate, Crazy Horse-Davis, Pauls Valley Municipal, and Sulphur Municipal airports | | | | |
| Jun 28 9:30AM | OASC Regional Airport Planning Meeting | Jasmine Moran Children's Museum, Seminole, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Holdenville Municipal, Okemah Flying Field, Prague Municipal, Seminole Municipal, and Shawnee Municipal airports | | | | |
| Jul 9-13 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 3-5. \$198/student | | | | |
| Jul 16-20 | AeroSpace Summer Camp- Tulsa Air and Space Center (TASC) | 7130 E. Apache, Tulsa, OK | 918-834-9900 | For Grades 5-9. \$198/student. | | | | |
| Jul 17 9:30AM | OASC Regional Airport Planning Meeting | Southwest Technology Center, Altus, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Holdenville Municipal, Okemah Flying Field, Prague Municipal, Seminole Municipal, and Shawnee Municipal airports | | | | |
| Jul 18 9:30AM | OASC Regional Airport Planning Meeting | Great Plains Technology Center, Frederick, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Chattanooga Sky Harbor, Frederick Municipal, Grandfield Municipal, and Tipton Municipal airports | | | | |
| Jul 19 9:30AM | OASC Regional Airport Planning Meeting | Red River Technology Center, Duncan, OK | Gary Gooch- 405-325-5652 gary@ou.edu | Halliburton Field-Duncan and Walters Municipal airports | | | | |



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A Message from Bob Jandebeur OKLAHOMA AERONAUTICS AND SPACE COMMISSION ACCOMPLISHMENTS

Retirement of Ilinois High School Aviation Teacher Creates Opportunity

[Editor's Note: Normally, we at the Oklahoma Aviator have much more local Oklahoma news than we can cover, so we don't often include news from other parts of the country. However, this piece is an exception. It tells the story of a very outstanding and long-running aviation program at Mundelein High School in Mundelein, IL.

Since the teacher responsible for operating the program is about it retire, it describes an opportunity for some aviation-oriented teacher to have the job of a lifetime. Please read on...] The "wild blue yonder" can't be

The "wild blue yonder" can't be too much wilder for retiring teacher Jim Jackson. Jackson will have thirty-three years teaching experience at one high school when he hangs up his hat in December 2001, but no teacher in the country can match Jackson's experience.

For starters, Jackson has the only high school curriculum that builds "real" airplanes. Jackson was an industrial arts teacher when he approached the School Board in 1980 and suggested an aviation curriculum. That suggestion has resulted in five airplanes and five years-long courses.

Jackson's unique method of financing the planes allows a private sponsor to purchase the supplies and parts. Students work on the planes for a two- to three-year period and when complete, Jackson tests the airplane and delivers it to the sponsor.

The students have built an Acro Sport Biplane, a Kitfox, a 250-mph Lancair 360, a Montana Coyote, and are now finishing a Super Lancair ES. Jackson and his sponsor, Doug Bartlett--CEO of Bartlett Manufacturing in Cary, IL-- plan to fly the Lancair to the North Pole in the summer of 2003 during the 100th anniversary of the Wright Brothers first powered flight.

Jackson and his program have been gathering awards since 1986 when he won the Experimental Aircraft Association (EAA) National Educator Award, followed by the EAA National School Flight Project Champion Award the following year. Jackson was the first high school teacher inducted into the National Teachers Hall of Fame in 1993, and he amazed the celebration committee when he flew into Emporia, KS in one of his student-built planes.

In 1995, Jackson was named one of the top 36 teachers in the country in the Disney National Teacher of the Year program. He has also won the Award for Excellence in Aviation Education, the National Wings of Fame Award, and the National Congress on Aviation and Space Education Award. In 1992, he was inducted into the Illinois Hall of Fame and was named the National Aerospace Teacher of the Year in 1995.

Jackson made his first World Record Flight from Chicago to the Artic Circle in a student-built airplane in the summer of 1994 with an alumnus of his program as copilot. That flight was chronicled in National Geographic Magazine in June 1994.

For twenty-five years, Jackson has been active in the EAA and exhibited student-built planes at the annual EAA convention in Oshkosh, WI. The Acro Sport II that was finished in 1986 was part of the exhibition for the 50th anniversary celebration of the Museum of Science and Industry in Chicago.

Over the years, Jackson has enhanced his curriculum by allowing students to fly with him and by providing unique opportunities for the students. An agreement with Lewis University in Romeoville, IL and Southern Illinois University in Carbondale allows student to earn twelve hours of college credit in aviation that can be applied to the colleges' flight programs.

"I wanted to make a difference in kids' live, and I think I did that," says Jackson about his upcoming retirement. Over 1000 students have completed the aviation program and over 300 students have continued their education in aviation-related fields.

Jackson has always marched to the beat of a different drummer. At Iowa State University where he earned his B.A., he was an All-American gymnast. He later earned his M.S. from Southern Illinois University and picked up his FAA Private Pilot's License and A&P Mechanic Certificate. He also climbed Mt. McKinley- at 20, 320 feet the highest peak in North Americawithout oxygen. His Harley motorcycle has taken him back and forth across the U.S. a couple of times; he has over 1000 skydives to his credit; and for the past five summers, he has been a photographic guide in Alaska's national parks.

His retirement plans are unclear, but they will certainly include his love of flying and outdoor adventure. Currently, he is leaning toward becoming an Alaskan bush pilot.

The Mundelein High School Board of Education is committed to continuing the aviation program that Jackson started and is eagerly searching for someone who can fill Jackson's shoes. Applicants are encouraged to contact the Director of Personnel, Patricia Steele, at 847-949-2200 x220. Or check out the school's web site at www.mhslake.net. Or, call Jim Jackson directly at 847-949-2200 x295.

Fill Out This Form!- cont'd

continued from p. 3.

ing addresses, so "The red station wagon in the library parking lot" simply won't do anymore.

Where the 8710 asks your nationality, it wants the country of your citizenship, not your ethnic or cultural heritage. Also often overlooked is one's ability to read, speak, and understand English. Logic indicates that most applicants will check "Yes." However, non-English speakers are allowed to fly where radio communications are not required. Of course, that complicates receiving good weather briefings, or ordering aviation's famous \$100 hamburger. You will need to go to the Flight Standards District Office for your practical test if you answer this one is "No."

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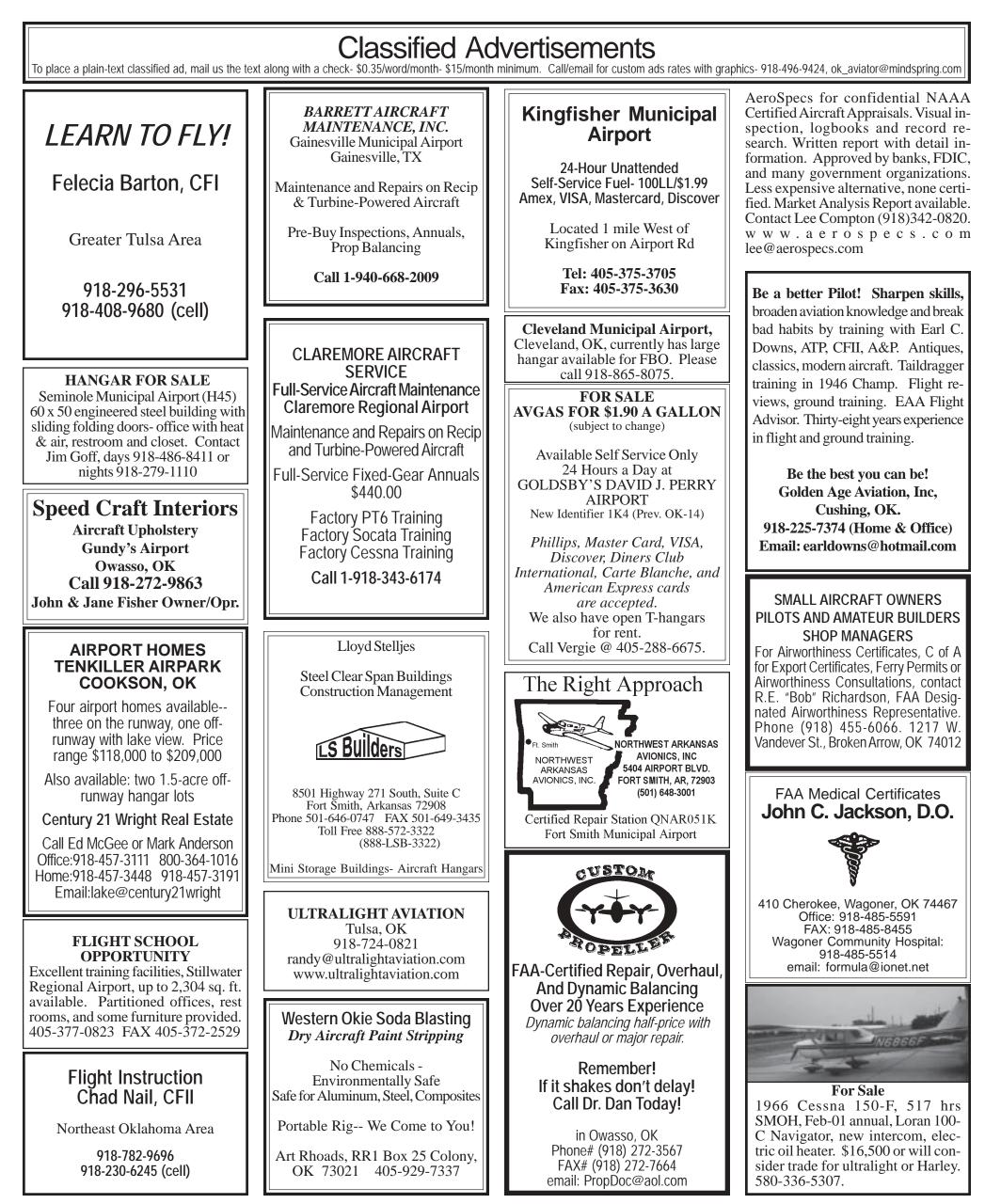


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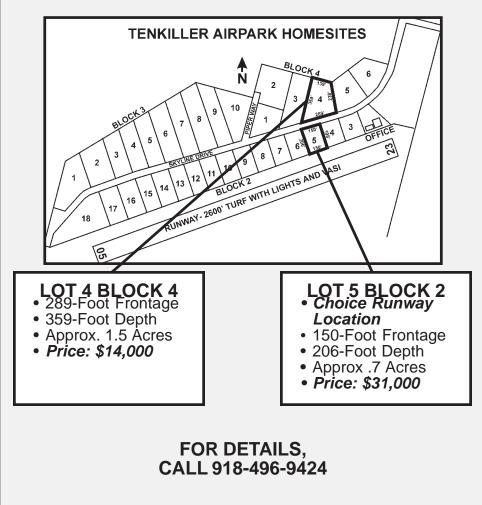
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